Course title: Research and Publication Ethics				
Course code: RPR 275	**No. of credits:** 2	**L-T-P :**22-0-12	**Learning hours:** 28	
Pre-requisite course code and title (if any): None				
Department:				
Course coordinator(s): Dr. L. N. Venkataraman		**Course instructors(s):** Dr. L. N. Venkataraman		
Contact details: venkataraman.ln@terisas.ac.in				
Course type: Core		**Course offered in:** 1st and 2nd semester		

Course description:

In today's academic world, research ethics is a trending topic. Although conducting research is fascinating, it also entails certain inherent challenges that involve very different ethical issues, such as bias, plagiarism, conflicts of interest, falsification of research results, informed consent, determination of authorship and adequacy of peer review publication processes. With the adequate combination of both theory and practice, this course will certainly help students critically analyzing research philosophy, ethics and case studies in an independent manner. From the pedagogical point of view, they will learn how to manage and evaluate a research work from the very preliminary stage of identifying ethical standards until the final publication of the work. Significantly, through this comprehensive course, students are motivated to address the impact of new technologies and social trends on research ethics and deliberate upon their ideas as to how to rebuild necessary codes of conduct to regulate multidisciplinary research activity. In the process of evaluating and critically debating issues relating to research philosophy and ethics in an exhaustive manner, students will necessarily comprehend the importance of scientific integrity in academic research. Thus, ensues acquisition of relevant reasoning skills that significantly increase the scope of sustainable scientific quality in their future research.

Course objectives:

The purpose of this course is to engage student researchers in reading about, understanding and discussing the responsible code of conduct of interdisciplinary scientific research. Specific learning objectives with respect to research ethics include:

- To know rules, issues, options, and resources for research ethics
- To familiarize with various institutional ethics review boards/academic integrity guidelines
- To understand the purpose and value of ethical decision-making
- To have a positive disposition towards continued learning about research ethics

Course Overview:

This course has a total seven modules focusing on the basics of philosophy of research and ethics, research integrity and publication ethics in general. Practical sessions are designed to identify areas of research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics and plagiarism tools will be introduced as part of this course.

Course content

Module	Topic	L	T	P
1.	**Research Philosophy & Ethical Norms & Politics** i. Introduction to Research Philosophy: Concept; Definitions; Nature & Scope ii. General Characteristics of a value-based Research, Axiological approach iii. Research Ethics; Definition; Moral Philosophy; Nature of Moral Judgments iv. Political Issues in Research, Ethical Norms & Responses v. Enhancing research interests, Research Collaboration & Research Recognition vi. Ethical guidelines in field research, Concealed Information & Extent of Respondents' rights	4	0	0
2.	**Scientific Research Conduct & Multidisciplinary Research** i. Elements of Research Ethics & Types of Research	4	0	0

	ii. Mixed Methods in Applied & Action Research			
	iii. Internet search, deep web search, Authenticated *v.* Fake information			
	iv. Research Integrity & Academic Honesty in Interdisciplinary Research			
	v. Redundant Publications; Duplicate & Overlapping Publications; Salami Slicing			
	vi. Selective Reporting and Misrepresentation of Data			
3.	**Publication Ethics & Best Practices**	5	0	0
	i. Publication Ethics: Introduction, Definition, & Importance			
	ii. Scientific Research Misconduct; Falsification, Fabrication & Plagiarism/Self-plagiarism, Kinds & Remedies			
	iii. Intellectual Property; Reasonable & Fair Use; Copyright and related IPR Issues			
	iv. Violation of Publication Ethics; Authorship/Co-authorship, Joint research/ Contributorship & Patentable Inventions- Extent of Rights & Claims			
	v. Best Practices/Standards Setting Initiatives and guidelines; COPE, WAME, UGC-CARE list *etc.*			
	vi. Publication Misconduct; Concept; Definition & Kinds of Problems & Unethical Behaviour			
	vii. Identification of Publication Misconduct, Complaints & Appeal Provisions			
4.	**Open Access Publishing & IPR Policy**	3	0	2
	i. Open Access Publications and Initiatives, Creative Common License			
	ii. Predatory Publishers & Journals			
	iii. Reference Management & Referencing Standards in Open Access Publishing			
	iv. SHERPA/RoMEO; Online Resources for Publisher Copyright & Self-archiving Policies			
	v. Data Management, Data Sharing Techniques, Data Reuse & Data Citation			
	vi. Software Tool to identify Predatory Publications developed by SPPU			
	vii. Journal Finder/ Journal suggestions tools viz., JANE, Elsevier Journal Finder, Springer Journal Suggester *etc.*			
5.	**Publication Misconduct & Remedies**	2	0	4
	A. Group Discussions (2 hrs.)			
	i. Subject specific Ethical Issues, FFP, Authorship			
	ii. Conflict of Interests; Copyright/Plagiarism Issues			
	iii. Sharing of data collected for a research (confidentiality, reuse, dissemination or republishing)			
	iv. Consent in publishing/ using different kinds of data and Simultaneous Submission			
	v. Complaints & Appeals: Case Studies/Examples of Publication Frauds from India & abroad			
	B. Software Tools (2 hrs.)			
	i. Research Literacy & Advocacy; Digital Humanities			
	ii. Use of Plagiarism Software like Turnitin, Urkund & other Open Source Software Tools			
	iii. Grammarly, FigShare *etc.*			

	iv. Library Support & Regular Training/Practice Sessions on various other Software and Tools like; Mendeley, Endnote, Zotero *etc.*				
6.	**Database (4 hrs.)** i. Indexing Database; Cross-disciplinary Research & Comprehensive Citation Search ii. Citation Database; Web of Science, SCOPUS, OSCOLA *etc.* iii. Article Influence Score & Cite score	2	0	4
7.	**Research Metrics (3 hrs.)** i. Science Citation Index Expanded (SCIE), Social Sciences Citation Index (SSCI), Emerging Sources Citation Index (ESCI) and the Conference Proceedings Citation Index (CPCI) ii. Impact factor as per Journal Citation Report, SNIP, SJR, IPP Journal Metrics & Cite Score iii. Citation based Metrics; h-index, g index, i10 index, etc., Google Scholar, Alternative Metrics/ Altmetrics	2	0	2
	Total	**22**	**0**	**12**

Evaluation criteria:

Continuous assessment will be done through classroom practical exercises, assignments, quizzes or group discussions. Student evaluation will be based on the term paper and the book review followed by the final major test to be conducted at the end of the course.

This course has seven modules in total.

- **Test 1**: Term Paper (written Submission based on modules 1,2 &3 -25%)
- **Test 2**: Book Review (Relevant to the area of Research-25%)
- **Test 3**: Major Test (Based on all modules-40%)
- **Class Participation:** (10%)

Learning outcomes:

On completion of this course, the students would be able to:

- To have a positive disposition towards continued learning about research philosophy & ethics
- To know Rules, Regulations, Issues, Options, and Scientific Resources of Research Ethics
- To learn the culture of fairness, honesty and integrity in academic communications and to understand the purpose and value of ethical decision-making
- Avoid wasteful and duplicate publications & encourage original contributions to advance Academic Research and Scholarship
- Acquiring knowledge & professional competence and expertise about Patents, Copyrights, and other forms of Intellectual Property Rights
- To promote social good and prevent or mitigate societal hazards through innovative ideas, creativity and research advocacy

Pedagogical Approach:

- Classroom lectures and tutorials, guest lectures, group activity and practical sessions with a significant focus on the detailed discussion of original research articles from scientific journals in class.
- Weightage will be given for active class participation.

Employability:

- Academic and Industrial Research involving *multidisciplinary* approach
- Academic Supervision to educate, mentor, and advise students
- Gain experience and advance knowledge of IPR Issues in Educational/Literary Works
- Promotion of research integrity through awareness of academic campaigns

Course Materials:

Required/Suggested readings

- The Handbook of Social Research Ethics, Donna M. Mertens, Pauline E. Ginsberg, SAGE (2009).
- What are Qualitative Research Ethics? Rose Wiles, Bloomsbury (2013).
- Research Ethics: Cases and Materials, Robin Levin Penslar, eds, Indiana University Press (1995).
- Research Ethics: A Philosophical Guide to the Responsible Conduct of Research, Gary Comstock, Cambridge University Press (2013)
- Scientific Integrity and Research Ethics: An Approach from the Ethos of Science, David Koepsell, Springer (2017)
- An Introduction to Ethical, Safety and Intellectual Property Rights Issues, Padma Nambisan, Elsvier (2017)

1. **Case studies (Indicative):**

- Ethics Education Library: http://ethics.iit.edu/eelibrary/case-study-collection
- UKRI Economic and Social Research Council: http://ethics.iit.edu/eelibrary/case-study-collection
- University of Miami Research Ethics Case Studies: http://miamictsi.org/research-ethics-case-studies

2. **Websites (Indicative):**

- For the latest regulations; guidelines on publication ethics and scientific research misconduct and falsification, fabrication & plagiarism/self-plagiarism: Refer the official website of the *University Grants Commission* @ https://www.ugc.ac.in/
- For Guidelines on IPR: Refer the official website of *Intellectual Property India* @ http://www.ipindia.nic.in/#content
- Committee on Publication Ethics @ https://publicationethics.org/
- World Association of Medical Editors @ https://www.wame.org/
- Open Access Publications :
  - What is Open Access? : https://www.openaccess.nl/en / https://opensource.com/resources/what-open-access
  - Open Access Scholarly Publishers Association: https://oaspa.org/
  - *Open Access* YouTube Channel: https://www.youtube.com/playlist?list=PL6165F4EEC7535538
  - Directory of Open Access Journals: https://doaj.org/
- Yale University list of predatory publishers & journals: https://guides.library.yale.edu/c.php?g=296124&p=1973764
- SHERPA/RoMEO; Online Resources for Publisher Copyright & Self-archiving Policies: http://sherpa.ac.uk/romeo/index.php
- Software Tool to identify Predatory Publications developed by SPPU: https://ugccare.unipune.ac.in/Apps1/User/Web/CloneJournals
- Journal Finder/ Journal suggestions tools
  - JANE: https://jane.biosemantics.org/
  - Elsevier Journal Finder: https://journalfinder.elsevier.com/
  - Springer Journal Suggester: https://journalsuggester.springer.com/
- Digital Humanities: https://mitpress.mit.edu/books/digitalhumanities
- Plagiarism Softwares (Contact TERI SAS Library for accessing the following software)
  - Turnitin: https://www.turnitin.com/
  - Urkund: https://www.urkund.com/
  - Open Source Software Tools : https://elearningindustry.com/top-10-free-plagiarism-detection-tools-for-teachers
- Other useful websites/softwares:

- o Grammarly: https://www.grammarly.com/
- o FigShare: https://figshare.com/
- o Mendeley: https://www.mendeley.com/?interaction_required=true
- o Endnote: https://endnote.com/
- o Zotero: https://www.zotero.org/
- o OSCOLA :
  https://www.law.ox.ac.uk/sites/files/oxlaw/oscola_4th_edn_hart_2012.pdf
- o Bluebook: https://www.legalbluebook.com/
- Indexing Database:
  - o Web of Science: https://mjl.clarivate.com/home
  - o SCOPUS: https://www.scopus.com/
- Article Influence Score & CiteScore:
  - o Eigenfactor: http://www.eigenfactor.org/methods.pdf

    CiteScore:https://www.elsevier.com/editors-update/story/journal-metrics/citescore-a-new-metric-to-help-you-choose-the-right-journal

3. **Journals:** Journals listed in the 'UGC Approved List of Journals' at https://www.ugc.ac.in/journallist/

Additional information (if any):

- Class Participation
- Study of other books/articles/reports/case studies/course materials *etc.* as specified by the instructor

Student responsibilities
Attendance, feedback, institutional discipline, research norms & ethics

Course Reviewers:

- Prof. Dr. Vinay K Srivastava, Director, Anthropological Survey of India
- Prof. Dr. Ramesh C Gaur, IGNCA
- Dr. L.N. Venkataraman, Assistant Professor, Department of Policy Studies, TERI School of Advanced Studies
- Ms. Nidhi Srivastava, Fellow, TERI

Prepared By

Dr. Jaya Vasudevan